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Beauty is Good: The appearance culture, the internalization of appearance ideals, and
dysfunctional appearance beliefs among tweens

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Abstract

Dysfunctional appearance beliefs have been identified as important risk factors in the development of body dissatisfaction and disordered eating behaviors among early adolescents. The current two-wave study among 10- to 14-year-olds ($N = 1597$, $M_{\text{age}} = 11.25$, $SD = 1.05$) aimed to delineate factors that contribute to the endorsement of such beliefs. Results showed that tweens discussed appearance-related topics with their friends more often when they frequently watched tween television programs (all time 1). Both media exposure and peer conversations (time 1) were related to attributing benefits to attractiveness (time 1) which, in turn, predicted the internalization of appearance ideals (time 1). The internalization of appearance ideals positively predicted the endorsement of dysfunctional appearance beliefs 6 months later.

Keywords: tween media, peer appearance conversations, dysfunctional appearance beliefs, rewards

Beauty is Good: The appearance culture, the internalization of appearance ideals, and dysfunctional appearance beliefs among tweens

An ideal outward appearance is highly valued in society, as it has been shown to lead to positive outcomes in life, such as popularity and positive judgements from others (Langlois et al., 2000). The media appear to reinforce this association by portraying those who are in accordance with the appearance standards with various benefits, such as involvement in romantic relationships (e.g., Northup & Liebler, 2010). Exposure to such messages might teach youth that complying with appearance ideals is a prerequisite for positive life outcomes.

Given the importance of appearances, the question arises whether and to what extent early adolescent boys and girls equate their own self-worth with their outward appearance. Crocker and Wolfe (2001) contend that judgements of self-worth are informed by self-evaluations in those domains on which self-esteem is contingent. Contingencies of self-worth develop in response to social influences; media messages arguing that attractiveness is valued by others may exert such an influence. Perceived adherence to self-standards in that domain (i.e., looking attractive) will, then, define the individual's perceptions of self-worth. Given that appearance-focused messages are encountered through media exposure but also through peer interactions, previous research has paid attention to an appearance culture in which media and peers jointly impose beauty ideals by creating an environment in which physical appearance is glorified and valued (e.g., Clark & Tiggemann, 2006).

The current study aimed to improve scholarly understanding of the relation between the appearance culture and the degree to which tweens equate their personal worth to physical appearance, which researchers coined the endorsement of dysfunctional appearance beliefs (e.g., "my value as a person depends on how I look," Spangler & Stice, 2001, p. 820). Such beliefs are considered dysfunctional because they give rise to erroneous interpretations through the schematic processing of environmental stimuli (Spangler & Stice, 2001), and

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have been related to eating disorders (Spangler, 2002), body dissatisfaction (Tiggemann, 2006), and antifat attitudes (Lin & Reid, 2009). The first contribution of this study is the examination of mechanisms through which media exposure and dysfunctional appearance beliefs may be related. These mechanisms involve (a) the internalization of appearance ideals and (b) attributing benefits to attractiveness. In doing so, the current study examined how social learning processes (Bandura, 2001) and the internalization of appearance ideals interact and explain how sociocultural factors influence tweens' dysfunctional appearance ideals.

Second, the current study focused on early adolescents as they go through many (biological) changes which force them to readjust their identities (Kroger, 2007). Appearance seems to play an important role in this identity development (Archer & Waterman, 1983). In addition, social acceptance becomes an inextricable goal in adolescents' lives, which could explain why they are more vigilant about messages regarding popularity and social acceptance and what it takes to achieve those things (APA, 2007). Such messages are abundantly present in media content (APA, 2007).

Third, this study focused on the influence of television programs that are specifically created for the "tween" audience, for three reasons. First, tweens (9- to 14-year-olds) are characterized by their search for more autonomy in their media selection and preference for programs that differentiate from typical children's programs (Larson, 1995). Second, Nickelodeon and Disney Channel have the largest market coverage of the five children's channels in [country deleted] (Boel, Wilkin, Kollqaku, & Piret, 2015). Moreover, Nickelodeon reaches 49% of its core audience (i.e., 4- to 14-year-olds) weekly (CIM Audimetrie, 2014). Lastly, although these tween programs feature storylines and characters that are much more tuned to the cognitions of tweens, they also contain a substantial amount of appearance ideals (e.g., Northup & Liebler, 2010).

To advance our understanding of how media exposure affects the endorsement of

dysfunctional appearance beliefs among tweens, an integrative model was tested. We postulated that an appearance culture in which appearance ideals are transmitted by the media and peers predicts tweens' internalization of appearance ideals and, in turn, their endorsement of dysfunctional appearance beliefs. Although prior studies have claimed that negative media effects can be explained by the fact that media figures are rewarded for certain behaviors (e.g., Harrison, 2000), this study was the first to examine whether tweens agree with statements on rewarded beauty and whether it can serve as an explanatory mechanism.

Sociocultural Influences on the Endorsement of Dysfunctional Appearance Beliefs

The mass media have been identified as the primary transmitters of (unrealistic) appearance ideals (e.g., Clark & Tiggemann, 2006). The contemporary feminine ideal emphasizes slenderness and thinness (Herbozo, Tantleff-Dunn, Gokee-Larose, & Thompson, 2004), youthfulness (Ganahl, Prinsen, & Netzey, 2003), and sexiness (Markula, 2011). Men's ideal body is characterized by a muscular upper-body and low body fat (Leit et al., 2001). The relation between exposure to such appearance ideals and body image concerns has been supported by prior research (for review see Grabe, Ward, & Hyde, 2008), also among younger samples. For instance, Clark and Tiggemann (2007) showed that appearance television exposure was related to young girls' body dissatisfaction and dieting behaviors. Groesz, Levine, and Murnen's (2002) meta-analysis also concluded the experimental effect of thin ideal images on adolescents' body dissatisfaction.

In addition to the mere visual presence of role models complying with appearance ideals, media messages offer a specific context to these ideals. Media content is replete with "beauty-is-good" messages. Smith, McIntosh, and Bazzini (1999) concluded that attractive characters in Hollywood movies were presented as more favorable than non-attractive characters. These messages also occur in content created for younger audiences. Herbozo et al. (2004) found that 72% of Disney movies focused on physical appearance and

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attractiveness; 84% of those movies associated female attractiveness with sociability, happiness, kindness, and success. Male attractiveness was related to positive attributes in 60% of the movies. Northup and Liebler (2010) documented beauty-is-good messages in nine Nickelodeon and Disney Channel programs and found that the thinner the character, the more she received positive comments about her appearance. It was also found that 54% of the characters could be classified as a classic beauty (i.e., long hair, fashionable but not heavily accessorized) or trendy girl (i.e., preoccupied with her appearance and boys) and these characters received the highest number of positive comments.

Exposure to such messages might impact tweens' body image by increasing their likelihood of endorsing dysfunctional appearance beliefs. Early adolescents might come to believe that appearance is a central aspect of their self-worth. Prior studies have provided evidence that media exposure shapes young people's appearance beliefs. For instance, Borzekowski, Robinson, and Killen (2000) showed that ninth-grade girls' music video consumption was related to increased perceived importance of appearance. Clark and Tiggemann (2007) showed that 8- to 13-year-old girls attached greater importance to appearance after being exposed to appearance media. In addition, appearance-related commercials have been shown to activate appearance schemas (i.e., beliefs about the importance of appearance) in adolescent boys (Tiggemann, Hargreaves, Polivy, & McFarlane, 2004). Therefore, the first hypothesis reads:

H1: The consumption of tween media is related to tweens' endorsement of dysfunctional appearance beliefs.

In addition to the influence of media, scholars have examined the role of peers in the development of body image concerns (e.g., Jones, Vigfusdottir, & Lee, 2004). Early adolescents spend a lot of time with friends and peers (Webb & Zimmer-Gembeck, 2014). And, peers might be an important linking variable between media exposure and body image

outcomes (Clark & Tiggemann, 2006). Prior research shows that exposure to objectifying media can increase men's stereotypical beliefs about and objectifying behavior towards women, and can affect women's likelihood of considering this objectifying conduct acceptable (Wright, Arroyo, & Bae, 2015). In addition, much research exists on the appearance culture among tweens in which peer conversations reinforce the value of appearance (e.g., Clark & Tiggemann, 2007). Such discussions add personal relevance to the ideals and reinforce their importance accordingly (Jones et al., 2004). The current study will consider appearance conversations as a means through which peers influence body image development, for three reasons. First, research shows that such conversations frequently take place among tweens; 40% of girls (aged 11 through 13) regularly discuss weight, body shape, and dieting with their friends (Levine, Smolak, Moodey, Shuman, & Hessen, 1994).

Although appearance conversations among boys have been less subject to research, Jones and Crawford (2005) did indicate the importance of peers in body dissatisfaction among boys, as well. Second, such conversations are theorized to direct attention to the body and appearance in general, highlight the existence of appearance ideals in society, and provide meaning to and interpretation of those ideals (Jones, 2004). Lastly, appearance-focused conversations have been associated with body dissatisfaction (e.g., Jones et al., 2004) and a higher tendency towards body comparison (e.g., Jones, 2004). By engaging in appearance-focused conversations boys and girls might, then, come to believe that appearance is important and equate their personal worth with the way they look. The second hypothesis was:

H2: Appearance conversations with friends are related to tweens' endorsement of dysfunctional appearance beliefs.

The Internalization of Appearance Ideals

Studies are needed that delineate the role of sociocultural factors (i.e., media exposure and peers) and the cognitive processes that drive the development of dysfunctional

appearance beliefs. The sociocultural framework of appearance ideals is the most widely used for explaining how sociocultural influences (peers, parents, and the media) relate to young people's body image (e.g., Halliwell & Harvey, 2006). Within this framework, the internalization of appearance ideals is proposed as a mediator between sources of societal influence and body image (Karazsia, van Dulmen, Wong, & Crowther, 2013), and refers to the degree to which socially defined ideals are cognitively accepted and used as personal standards (Thompson & Stice, 2001).

Research shows that thin ideal media exposure drives this internalization among adolescents (e.g., Jones et al., 2004). Internalization, in turn, has been proposed as a risk factor in body image disturbances (Thompson & Stice, 2001). Moreover, the internalization of appearance ideals acts as a crucial mechanism accounting for the influence of media exposure on body image. Keery, van den Berg, and Thompson (2004) showed, for instance, that media exposure affected girls' body dissatisfaction through internalization. Clark and Tiggemann (2008) added that girls' exposure to appearance television and magazines was related to internalization which was, in turn, related to body image across time (i.e., 1 year). The sociocultural model has also been supported among boys (Halliwell & Harvey, 2006), although they internalize appearance ideals to a lesser extent than girls.

The current study draws from sociocultural models to help predict the influence of exposure to tween programming on endorsement of dysfunctional appearance beliefs. Given the popularity of tween programs among 9- to 14-year-olds (e.g., Rideout, 2007), and the high prevalence of appearance ideals in such programming (Northup & Liebler, 2010), we argue that such exposure relates to internalization of appearance ideals which, in turn, affects the extent to which they equate their self-worth to appearance. More specifically, once socially defined appearance ideals are internalized, they are argued to have an impact on the sense of self (Jones et al., 2004; Moradi & Huang, 2008); perceptions of worth depend on

evaluations of the self in areas deemed important to the individual (Crocker & Wolfe, 2001).

The areas on which self-esteem is contingent develop in response to cultural norms and values (Crocker & Wolfe, 2001). Therefore, we argue that tweens who have internalized societal appearance ideals as personal standards will judge their self-worth based on perceived adherence to those standards. As a result, we hypothesized the following:

H3: The consumption of tween media is related to higher levels of internalization of appearance ideals which, in turn, is related to higher endorsement of dysfunctional appearance beliefs.

Adding peer influence to the hypothesized relation between media exposure and dysfunctional appearance beliefs might further increase our knowledge on how this influence takes place. In particular, interactions with peers might function as a means to verify the importance of appearance as early adolescents highly value the opinion of their peers (Steinberg & Morris, 2001). Specifically, media content might provide topics that are discussed with friends (e.g., the importance of appearance) (Jones et al., 2004). Subsequently, media ideals might be translated into peer norms and, as such, influence the importance tweens attach to appearance (Clark & Tiggemann, 2008). Appearance conversations have been shown to lead to higher levels of internalization (e.g., Clark & Tiggemann, 2006), indicating the importance of peers in the acceptance of appearance ideals. Accordingly, the fourth hypothesis was as follows:

H4: Appearance conversations among friends are related to higher levels of internalization of appearance ideals which, in turn, is related to higher endorsement of dysfunctional appearance beliefs.

Attributing Benefits to Attractiveness

In this literature, researchers have often used social cognitive theory (Bandura, 2001) to explain the underlying process: observing how attractive media figures are rewarded for

complying with the prevailing appearance ideals might trigger a modeling process.

Importantly, imitation of the behavior is more likely to occur when the modeled behavior is followed by outcomes that are valued by the individual (Harrison, 2000; Holmstrom, 2004).

Furthermore, considering that the feminine gender role expects women to be attractive and to invest in their appearance (Mahalik & Morray, 2005), and attractive people are judged more positively (Langlois et al, 2000), it is argued that women internalize these ideals because of the expected rewards for fitting the ideal mold (Engeln-Maddox , 2006). The objective of the current study was to explore whether applying these tenets of social cognitive theory could advance our understanding of how sociocultural factors influence the internalization of appearance ideals. Specifically, it was examined whether exposure to media is related to the attribution of benefits to looking attractive. Based on social cognitive theory, we further argue that the association of attractiveness with various benefits might provide incentives to internalize those ideals as personal standards. The fifth and sixth hypotheses were:

H5: Higher consumption of tween television programs predicts tweens' agreement with statements on the benefits associated with looking attractive.

H6: The agreement with statements on the benefits associated with looking attractive acts as a mediator in the relation between consumption of tween television programs and the internalization of appearance ideals.

Given that peers are able to enforce the value of appearance, we reason that peers are also able to enforce the association between attractiveness and benefits. Web and Zimmer-Gembeck (2014), for instance, argued that interactions with peers can teach early adolescents about the positive consequences of having an appearance that is in accordance with the prevailing appearance ideals, such as being popular. Two hypotheses tested this reasoning:

H7: Engaging in appearance conversations predicts tweens' agreement with statements on the benefits associated with looking attractive.

H8: The agreement with statements on the benefits associated with looking attractive acts as a mediator in the relation between engaging in appearance conversations and the internalization of appearance ideals.

In sum, this study examined the relation between tween media exposure and dysfunctional appearance beliefs and took into account the importance of peers in tweens' lives. The internalization of appearance ideals was considered an explanatory mechanism for this relation and the agreement with statements on benefits for attractiveness was added to an integrative model that examines tweens' body image development. We argue that early adolescents can become part of an appearance culture in which media messages and peers jointly impose beauty ideals. Specifically, we follow Clark and Tiggemann's (2008) suggestion that appearance conversations with friends might mediate between the media and body image outcomes: such conversations are fueled by media content and can translate media ideals into peer norms, which increases acceptance and internalization of ideal standards of attractiveness as personal standards. The last hypothesis of the study was:

H9: Engaging in appearance conversations acts as a mediator in the relation between tween media exposure and body image outcomes.

Method

Sample

A two-wave panel study using a 6-month interval was conducted among 9 to 14-year-olds in 39 randomly selected schools from different parts of [country]. The children and their parents were informed about study aims, procedures, and confidentiality measures. After active parental consent was obtained, children filled out a first questionnaire in the fall of 2014 and a second in March 2015. Researchers were present at all time to ensure optimal circumstances. No incentive was provided as is customary in [country]. A total of 1,938 children participated at baseline, 1,597 children (808 boys and 785 girls) completed both

questionnaires. The mean age at baseline was 11.25 ($SD = 1.05$), 91.5% of the children were born in [country]; 76.3% reported that their parents were married, 22.9% lived with divorced parents. Of those in secondary school, 86.5% followed a general educational program.

Differences were explored between children who participated in one wave ($N = 369$) and those who participated in both waves with regard to all relevant variables (at wave 1). A chi-square test showed that participants who participated in only one wave were more likely to be boys, $\chi^2(1) = 15.34, p < .001$. For the other variables a MANOVA analysis using Pillai's Trace revealed no differences, $V = .003, F(4, 1404) = 1.153, p = .33, \eta_p^2 = .003$.

Measures

Demographics. Participants reported their gender (1 = *boy* and 2 = *girl*) and age, and estimated their weight and height. The mean BMI was 17.10 kg/m² ($SD = 3.06$). Although the prevalence of overweight is slightly underestimated with self-reported data, making the classification in BMI categories sensitive to errors (Segher & Claessens, 2010), the BMI measure did not serve as a predictor but only as a covariate in the current study.

Dysfunctional appearance beliefs. The Beliefs about Appearance Scale (Spangler & Stice, 2001) measures dysfunctional attitudes about bodily appearance, in particular the perceived importance of appearance for achievement, self-view, and relationships. The original 20 items have not yet been examined among 9- to 14-year-olds. During the data collection respondents showed poor understanding of some items. On this basis, and based on factor loadings (i.e., items with a factor loading of $> .40$ were retained), we only used eight items of the original scale. Respondents indicated their agreement with items such as "People will think less of me if I don't look my best" and "My life will be more exciting or rewarding if I look good" on a 5-point scale ranging from *I totally disagree* (=1) to *I totally agree* (=5). This measure had an overall alpha of .91 ($\alpha_{boys} = .90$ and $\alpha_{girls} = .92$). A mean score was computed such that higher scores indicate higher dysfunctional appearance beliefs.

Appearance conversations. The questionnaire included the Appearance Conversations subscale of the Appearance Culture among Peers Scale (Jones, et al., 2004), for which good validity and reliability have been demonstrated among tweens (e.g., Clark & Tiggemann, 2006). The original scale consists of five items and analyses are often carried out separately for boys and girls (e.g., Jones et al., 2004). However, to combine the results for boys and girls, we did not include the items that would generate very different responses from boys and girls (i.e. “My friends and I talk about what we can do to look more attractive” and “My friends and I talk about how we want our body to look like”). Given that girls self-disclose more to their friends than boys (Rose, 2007), these items might be more prevalent topics of conversations among girls, but not among boys. Respondents were therefore asked to indicate, on a 5-point scale ranging from *Never* (=1) to *Very often* (=5), how often they talked with their friends about the shape and size of their body, how important it is to look attractive, and how their bodies look in their clothes. The scale showed good reliability (overall $\alpha = .80$, $\alpha_{boys} = .86$ and $\alpha_{girls} = .85$). An overall estimate was obtained by calculating the mean across the items. Higher scores indicate more frequent appearance conversations.

The internalization of appearance ideals. Five items of the Internalization subscale of the Sociocultural Attitudes towards Appearance Scale (Thompson, Van den Berg, Roehrig, Guarda, & Heinberg, 2004) were used. To limit the length of the questionnaire, only the items with a factor loading of $> .4$ were used. And, we followed Sánchez-Carracedo et al.’s (2012) recommendation of not including reverse-coded items. As such, respondents used a 5-point scale, ranging from *I totally disagree* (=1) to *I totally agree* (=5) to rate such items as “I compare my body to the bodies of TV and movie stars” and “I would like my body to look like the people who are on TV.” The scale showed good reliability (overall $\alpha = .88$, $\alpha_{boys} = .86$ and $\alpha_{girls} = .90$). A mean score was computed such that higher scores indicate greater internalization of appearance ideals.

Attributing benefits to attractiveness. To measure tweens' view on the benefits associated with looking attractive, a scale was developed. Respondents were asked to imagine they looked like a person they find very attractive. Subsequently, using a scale ranging from *I totally disagree* (=1) to *I totally agree* (=5), they indicated their agreement with five possible outcomes (i.e., being happier, being more self-confident, receiving more attention from friends and peers, thinking it would be easier to find a girl/boyfriend, and doing better in school). Exploratory factor analysis extracted one factor, with an eigenvalue of 2.89 and explained variance of 57.80. The scale showed good reliability (overall $\alpha = .82$, $\alpha_{boys} = .83$ and $\alpha_{girls} = .83$). A mean score was computed such that higher scores indicate greater attribution of benefits to attractiveness.

Tween media. Using a 5-point scale ranging from *Never* (=1) to *Almost every day* (=5), respondents indicated how often they watched eight programs that were specifically created for the tween audience and broadcast at the time of the study (i.e., *Big Time Rush*, *H2O Just Add Water*, *Life With Boys*, *Wingin' It*, *Young Justice*, *Jessie*, *Austin & Ally*, and *Violetta*). A mean score was computed such that higher scores indicated more teen media exposure

Results

Table 1 presents zero-order inter-correlations and descriptive statistics for the entire sample, as well as separately for boys and girls. Tweens in our sample generally did not equate their self-worth with physical appearance: the mean level of dysfunctional appearance beliefs at wave 2 was 2.01 ($SD = .86$). A MANCOVA analysis (using Pillai's Trace and controlling for age and BMI), $V = .06$, $F(6, 1063) = 10.69$, $p < .001$, $\eta_p^2 = .06$, and subsequent separate ANCOVAs revealed that girls showed greater tween media exposure than boys, $F(1, 1068) = 55.58$, $p < .001$, $\eta_p^2 = .05$, had more appearance conversations with their friends, $F(1, 1068) = 11.42$, $p = .001$, $\eta_p^2 = .01$, and endorsed more dysfunctional appearance beliefs than boys, although this finding was only marginally significant, $F(1, 1068) = 2.92$, $p = .08$, $\eta_p^2 =$

.003.

[TABLE 1 ABOUT HERE]

To examine whether there was any conceptual overlap between the constructs, a discriminant validity test was performed. Discriminant validity is the extent to which a latent variable discriminates from other latent variables in the model and is assessed by comparing the square root of the average variance extracted (AVE) of each latent variable with the correlation among each pair of latent constructs (Farrell & Rudd, 2009). The square root of AVE of the construct exceeded any correlation with the other constructs, indicating that the constructs in the measurement model differed from each other (information available upon request from the corresponding author).

To detect potential differences between schools, we examined the intraclass correlation coefficient (ICC) for dysfunctional appearance beliefs, $z = 1.69, p = .09, \eta^2 = .02$, internalization, $z = 2.02, p = .04, \eta^2 = .03$, perceived benefits of attractiveness, $z = 1.76, p = .08, \eta^2 = .02$, and appearance conversations, $z = .15, p = .87, \eta^2 = .04$. The ICC is the proportion of variance in the outcome due to within-unit differences at higher levels, i.e. the schools. As this showed that the cross-school variance was not significant and the ICC was close to zero, multilevel models were not further developed (Heck, Thomas, & Tabata, 2013).

Testing the hypothesized model

The integrative model was tested with structural equation modeling (AMOS) using the maximum likelihood method. The model controlled for the baseline values of age and BMI by employing these variables as predictors for all of the endogenous variables. The model was first tested for the entire sample and showed an adequate fit of the data (Figure 1). The model yielded a chi-square value of 1574.28 with 435 degrees of freedom, $p < .001$, RMSEA = .04, SRMR = .03, CFI = .95; $\chi^2/df = 3.62$. The results indicated that 3.4% of the variance of appearance conversations at wave 1 could be explained by tween media exposure at wave 1;

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21% of the variance of attributing benefits to attractiveness at wave 1 could be explained by tween media exposure and appearance conversations; tween media exposure, appearance conversations, and attributing benefits to attractiveness explained 27.1% of the variance of the internalization of appearance ideals at wave 1 and 42% of the variance of dysfunctional appearance beliefs at wave 2 could be explained by media exposure, appearance conversations, attributing benefits to attractiveness, and internalization.

[FIGURE 1 ABOUT HERE]

Tween media exposure at wave 1 did not predict the endorsement of dysfunctional appearance beliefs at wave 2, $\beta = .00$, $SE = .02$, $p = .96$. Hypothesis 1 was thus not supported. However, tween media exposure at wave 1 was related to the internalization of appearance ideals at wave 1, $\beta = .05$, $SE = .02$, $p < .05$, which, in turn, predicted the endorsement of dysfunctional appearance beliefs at wave 2, $\beta = .12$, $SE = .04$, $p < .001$. Also, appearance conversations with friends at wave 1 did not predict the endorsement of dysfunctional appearance beliefs at wave 2, $\beta = .00$, $SE = .04$, $p = .76$. As such, Hypothesis 2 was not supported. However, engaging in appearance conversations was related to the internalization of appearance ideals at wave 1, $\beta = .31$, $SE = .03$, $p < .001$, which, in turn, predicted dysfunctional appearance beliefs at wave 2. With respect to the existence of an appearance culture, our results indicated that higher consumption of tween television programs was related to more appearance conversations with friends, $\beta = .16$, $SE = .02$, $p < .001$. Both media exposure (wave 1) and appearance conversations (wave 1) were significant predictors of tweens' attribution of benefits to attractiveness, $\beta = .08$, $SE = .02$, $p < .01$ and $\beta = .40$, $SE = .04$, $p < .001$ respectively, which confirms Hypotheses 5 and 7. Moreover, attributing benefits to attractiveness at wave 1 predicted higher levels of internalizing appearance ideals at wave 1, $\beta = .28$, $SE = .02$, $p < .001$, but was not a predictor of dysfunctional appearance beliefs at wave 2, $\beta = .05$, $SE = .04$, $p = .21$.

To decompose the total indirect effect into the separate mediation effects, we created user-defined estimands in AMOS. Multiple imputation was performed as the bootstrapping method does not allow the sample to include missing data.¹ Four hundred and seventy-two respondents (29.6%) had missing data. Two hundred and ten of those respondents had only one missing value that had to be imputed. All variables had less than 5% missing data.

Our results confirm the explanatory value of internalization in the studied relations (Hypothesis 3 and 4): the indirect relation between tween media exposure at wave 1 and dysfunctional appearance beliefs at wave 2 through the internalization of appearance ideals (wave 1) was significant, $\beta = .00$, $SE = .003$, 95% CI [.001, .012], $p < .05$. The results also showed that the relation between appearance conversations among friends at wave 1 and dysfunctional appearance beliefs at wave 2 was mediated by internalization (wave 1), $\beta = .04$, $SE = .012$, 95% CI [.025, .071], $p = .001$. Hypotheses 6 and 8 postulated that higher tween media exposure at wave 1 and more appearance conversations among friends at wave 1 would predict higher levels of internalizing ideals at wave 1 and that this relation would be mediated by the attribution of benefits to attractiveness. Both hypotheses were confirmed: tween media exposure, $\beta = .01$, $SE = .005$, 95% CI [.001, .027], $p < .01$ and appearance conversations, $\beta = .02$, $SE = .004$, 95% CI [.009, .026], $p = .001$.

The indirect relation between media exposure at wave 1 and dysfunctional appearance beliefs at wave 2 through both the attribution of benefits to attractiveness (wave 1) and the internalization of appearance ideals (wave 1) was also significant, $\beta = .00$, $SE = .001$, 95% CI [.001, .005], $p < .01$. The indirect relation between appearance conversations among friends

¹ In multiple imputation, each missing value is replaced by a simulated value and m plausible alternative versions of the complete dataset are generated (Schafer & Graham, 2002). In our study, five new datasets were generated and we tested our hypothesized model with each dataset. These analyses did not differ substantially and the model that is reported in the manuscript was analyzed with the fifth dataset that was obtained from the MI method.

at wave 1 and dysfunctional appearance beliefs at wave 2 through both the attribution of benefits to attractiveness (wave 1) and the internalization of appearance ideals (wave 1) was also significant, $\beta = .02$, $SE = .004$, 95% CI [.009, .026], $p = .001$. In addition, our results provide support for the intervening role of appearance conversations in the relation between tween media exposure at wave 1 and the attribution of benefits to attractiveness at wave 1, $\beta = .06$, $SE = .011$, 95% CI [.038, .081], $p = .001$ and the internalization of appearance ideals at wave 1, $\beta = .03$, $SE = .007$, 95% CI [.021, .048], $p < .01$, but not dysfunctional appearance beliefs, thereby partially supporting Hypothesis 9.

As for the total integrative model, the results from a bootstrapping procedure (1000 samples, ML bootstrap, 95% CI) revealed that the standardized indirect effect of exposure to tween media at wave 1 on dysfunctional appearance beliefs at wave 2 was mediated by appearance conversations among peers (wave 1), attributing benefits to attractiveness (wave 1), and internalization (wave 1), $\beta = .02$, $SE = .009$, 95% CI = [.11, .045], $p < .01$.

Gender differences. Preliminary results showed that gender influenced all variables in our model, except for internalization and the attribution of benefits to attractiveness. We therefore decided to compare the integrative model for boys and girls. We first confirmed that there was measurement invariance; the groups could therefore be compared. Subsequently, we examined whether the hypothesized model was moderated by gender through a multi-group analysis. Results showed that the unconstrained model (i.e., model where the parameters vary between the groups) did not significantly differ from the constrained model (i.e., model where the parameters are constrained to be equal), indicating that the processes did not differ for boys and girls. The model did explain more variance of dysfunctional appearance beliefs (wave 2) among girls ($R^2 = .38$ for boys, $R^2 = .46$ for girls).

Additional analysis. To further examine whether exposure to tween programming would relate to the internalization of appearance ideals over time, and whether the attribution

of benefits to attractiveness would account for this relation, we performed an additional analysis. More specifically, the hypothesized model (Figure 1) was tested again but included the internalization of appearance ideals at wave 2 (instead of wave 1) as the criterion variable. The model achieved a good fit, $\chi^2 = 2220.62$ with 594 degrees of freedom, $p < .001$, RMSEA = .04, SRMR = .03, CFI = .94; $\chi^2/df = 3.74$. It was shown that tween media exposure was not related to the internalization of appearance ideals over time, $\beta = .04$, $SE = .02$, $p = .12$. However, tween media exposure was related to the attribution of benefits to attractiveness, $\beta = .08$, $SE = .02$, $p = .001$ which, in turn, predicted the internalization of appearance ideals 6 months later, $\beta = .12$, $SE = .03$, $p < .001$. This indirect relation was significant, $\beta = .01$, $SE = .003$, 95% CI = [.003, .016], $p < .01$.

Discussion

The current study sought to delineate factors that contribute to 9- to-14-year-old's inclination to endorse dysfunctional appearance beliefs. It explored, first, whether there was an appearance culture in which exposure to tween television programs and engagement in appearance conversations among peers predict the endorsement of dysfunctional appearance beliefs. Second, we examined whether the internalization of appearance ideals acts as a mediator in the relation between peer and media variables and the endorsement of dysfunctional appearance beliefs. Third, we described the role of attributing benefits to attractiveness within this process. Overall, the results provided support for the hypothesized model and offer some important insights for the literature.

Sociocultural Influences on Dysfunctional Appearance Beliefs

In the current study, the extent to which tweens watch television programs such as *Violetta* and *Austin and Ally* and discussed appearance topics with their friends were not directly related to the endorsement of dysfunctional appearance beliefs over time when the attribution of benefits to attractiveness and the internalization of appearance ideals were taken

into account. This finding is in line with Jones' (2004) unexpected finding that peer appearance context variables had little power in her longitudinal analyses involving body dissatisfaction. However, Clark and Tiggemann (2007, 2008) did show that, among 9- to 12-year-old girls, exposure to appearance television and magazines and appearance conversations were related to appearance schemas, 1 year later. Appearance schemas are related to the notion of dysfunctional appearance beliefs as they also include individuals' beliefs about appearance and the importance thereof in their lives (Clark & Tiggemann, 2008). Such schemas represent cognitive structures that organize the processing of self-relevant information in a variety of domains, including personality and the social self (Cash & Labarge, 1996), and have self-evaluative and motivational components (Clark & Tiggemann, 2008). Dysfunctional appearance beliefs focus specifically on the importance of appearance in evaluations of personal worth and are thought to be central to eating disorders (Spangler & Stice, 2001). The endorsement of such beliefs has not been previously examined among 10- to 14-year-olds. Overall, tweens in our sample reported endorsing dysfunctional appearance ideals to a lesser extent than adolescents in Spangler's study (2002). Such factors may explain why, in the current study, sociocultural factors were not directly related to tweens' endorsement of dysfunctional appearance beliefs. Moreover, the inclusion of the internalization of appearance ideals and attribution of benefits to attractiveness might have reduced the variance to be explained by the sociocultural factors in the model.

Benefits of Attractiveness and the Internalization of Appearance Ideals as Mediators

To better understand how media exposure and peer interaction relate to dysfunctional appearance beliefs among tweens, an explanatory mechanism involving the internalization of appearance ideals was tested. The current findings suggest that by being exposed to media messages and engaging in peer conversations that reinforce the value of appearance, tweens are inclined to accept societal appearance ideals as personal standards which is, in turn,

related to the endorsement of dysfunctional appearance beliefs, 6 months later.

The current study also added the attribution of benefits to attractiveness to explain why girls and boys are inclined to accept culturally defined appearance ideals and adopt them as personal standards. Researchers have suggested that the rewards of complying to appearance ideals can trigger a learning process that can instigate certain media effects (e.g., Harrison, 2000). Our findings suggest that media exposure and interactions with peers are related to tweens' agreement with statements on rewarded beauty which, in turn, related to a higher inclination to internalize ideals. Notably, attributing benefits to attractiveness was most strongly related to appearance conversations. We therefore conclude that the social context is particularly important for tweens to learn about possible consequences of being attractive.

Gender and the Endorsement of Dysfunctional Appearance Beliefs

Our findings indicate that the integrative model was an adequate representation of the process for girls as well as boys. Both boys and girls appear to internalize socio-cultural messages about appearance ideals they encounter in media content and through their friends and feel pressure to conform to such ideals. The internalization of appearance ideals appears to be a key variable in this process: tween media exposure, conversations with friends, and the attribution of benefits to attractiveness only affected the endorsement of dysfunctional appearance beliefs over time when girls and boys internalized the appearance ideals.

Although there were no significant differences in the examined relations, the model better explained the endorsement of dysfunctional appearance ideals for girls. In addition, girls reported a higher value on some of our key variables. For instance, girls reported engaging in more frequent appearance conversations with their friends. This finding resonates with earlier findings that girls' friendships are characterized by trust and the sharing of feelings and thoughts (Rose, 2007). They may thus be more inclined to share their expectations of the ideal female appearance. In addition, our results show that such

conversations relate to young girls' acceptance of the ideals. The latter is in agreement with McCabe and Ricciardelli (2001) who argued that girls experience more pressure from peers to internalize cultural ideals. In addition, girls in our study generally endorsed more dysfunctional appearance beliefs. The cultural emphasis that is placed on appearance for girls and women (Jung & Lennon, 2003) supports this finding. More specifically, a component of femininity norms is that women are expected to be attractive and to invest in their appearance (e.g., Mahalik & Morray, 2005). Researchers argue that contemporary society socializes girls and women to treat themselves as objects to be evaluated solely for their physical attractiveness (Moradi & Huan, 2008). Previous research has shown that media content is replete with these kind of messages (Wright, 2012), which trigger a psychological process in which girls internalize an observer's perspective on their own body and value their appearance higher than their health or personality (e.g., Moradi & Huan, 2008). Girls have been shown to report higher levels of self-objectification than boys (e.g., Vandenberg & Eggermont, 2014). By including a measure on self-objectification, future studies could increase our understanding of sociocultural influences on dysfunctional appearance beliefs.

Limitations and Future Research

The findings of the current study are limited in some respects. A first limitation lies in the complexity of the body image development process among girls and boys. For boys, the male ideal body combines thinness with a highly muscled upper-body (e.g., Leit et al., 2001). The measures in our study, however, only asked boys about appearance in general and did not explicitly focus on muscularity as part of this appearance. Future studies should include measures that correspond to the male ideal appearance such as the muscle-building conversations scale developed by Jones and Crawford (2005). For girls, contemporary appearance ideals not only highlight the importance of being thin but also focus attention on other aspects of the outward appearance, such as being tanned and having flawless skin.

Future studies would benefit from using measures that include a broader range of appearance features. Second, given the self-report method, tweens in our sample might have had difficulty estimating, for instance, how often they discussed appearance with their friends or how highly they valued appearance in self-evaluations. Future research could include reports of friends or parents to acquire a more complete understanding of the factors that influence body image development. Third, our study used data from a two-wave panel study which might have been too limited. By using a three-wave panel study the proposed relations and the temporal order thereof might have been more rigorously tested. Fourth, the objective of the current study was to elaborate on the influence of beauty-is-good messages on tweens' body image. As prior research has documented the prevalence of such messages in tween television programs (Northup & Liebler, 2010), we focused on programs aired on Nickelodeon and Disney Channel. We believe our study provides an important stepping stone to future studies as the results tentatively indicate that exposure to such media content relates to tweens' perception of rewarded beauty. Studies examining tweens' exposure to beauty-is-good messages in both adult television content and children's programs and studies adopting an experimental design to examine the effect of beauty-is-good messages are warranted. Lastly, although the current study outlined a theoretical process by which depictions of rewarded beauty exert an influence on tweens' body image, future studies are necessary to further outline the associated cognitive processes. In addition, future research may also benefit from taking into account self-perceived attractiveness when asking respondents to imagine how their lives would be like if they looked like an idealized target.

Conclusion

Dysfunctional appearance beliefs focus on the degree to which appearance determines personal worth (Cooper, 1997), and are considered dysfunctional because they influence the interpretation of and reaction to environmental stimuli (Spangler & Stice, 2001). However,

research shows that appearance-based judgements are ubiquitous and attractive people are perceived more positively (e.g., Langlois et al, 2000), rendering such beliefs true. An important note is that, in this study, appearance beliefs are considered dysfunctional in terms of associated negative outcomes. For instance, a disproportionate emphasis on appearance in determining self-views has been related to eating disorders (Spangler, 2002).

This study's contribution is that it increases scholarly knowledge on factors contributing to the endorsement of such appearance beliefs among tweens. The results showed, first, that the engagement in peer appearance conversations was associated with the frequency with which tween television programs are watched. This finding extends those of Clark and Tiggemann (2006, 2007) who showed that exposure to appearance magazines and television was related to appearance conversations. Based on this finding and the higher predictive value of appearance conversations for all the endogenous variables in our model, we conclude that peers play an important role in increasing the value of appearance. Second, although both media exposure and peers were not directly associated with dysfunctional appearance ideals over time, the internalization of appearance ideals served as a mediator in this relation. We believe our findings provide an interesting extension to those of Clark and Tiggemann (2007, 2008), who proposed appearance schemas as a mechanism parallel to that of the internalization of appearance ideals. They argue that appearance schemas represent a broader notion than thin-ideal internalization. The current study aimed at understanding how tweens come to believe that appearance is an important indicator of self-worth. The findings indicate that the internalization of appearance ideals is temporally antecedent to such beliefs. Third, the current study was the first to show that the agreement with statements on rewarded beauty plays an important role in this process. Overall, the results suggest that the influence of media exposure and peers unfolds in similar ways for boys and girls.

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TWEEN TELEVISION AND DYSFUNCTIONAL APPEARANCE BELIEFS

Table 1

Descriptive statistics and zero-order correlations

	1	2	3	4	5	6
1 Tween media	1	.14**	.15**	.15**	.10**	.08**
2 Appearance Conversations		1	.33**	.37**	.43**	.31**
3 Attribution of benefits to attractiveness			1	.36**	.62**	.44**
4 The internalization of appearance ideals				1	.47**	.38**
5 Dysfunctional appearance beliefs (wave 1)					1	.56**
6 Dysfunctional appearance beliefs (wave 2)						1
Range	1-5	1-5	1-5	1-5	1-5	1-5
<i>M(SD)</i> for entire sample	2.31(1.04)	1.64(.81)	2.68(.99)	1.78(.80)	2.09(.83)	2.01(.86)
<i>M(SD)</i> for boys	2.09(.99)	1.59(.80)	2.68(.99)	1.77(.76)	2.08(.81)	1.96(.83)
<i>M(SD)</i> for girls	2.54(1.05)	1.70(.82)	2.67(.99)	1.79(.84)	2.12(.85)	2.06(.89)

Note. * $p < .05$, ** $p < .01$

TWEEN TELEVISION AND DYSFUNCTIONAL APPEARANCE BELIEFS

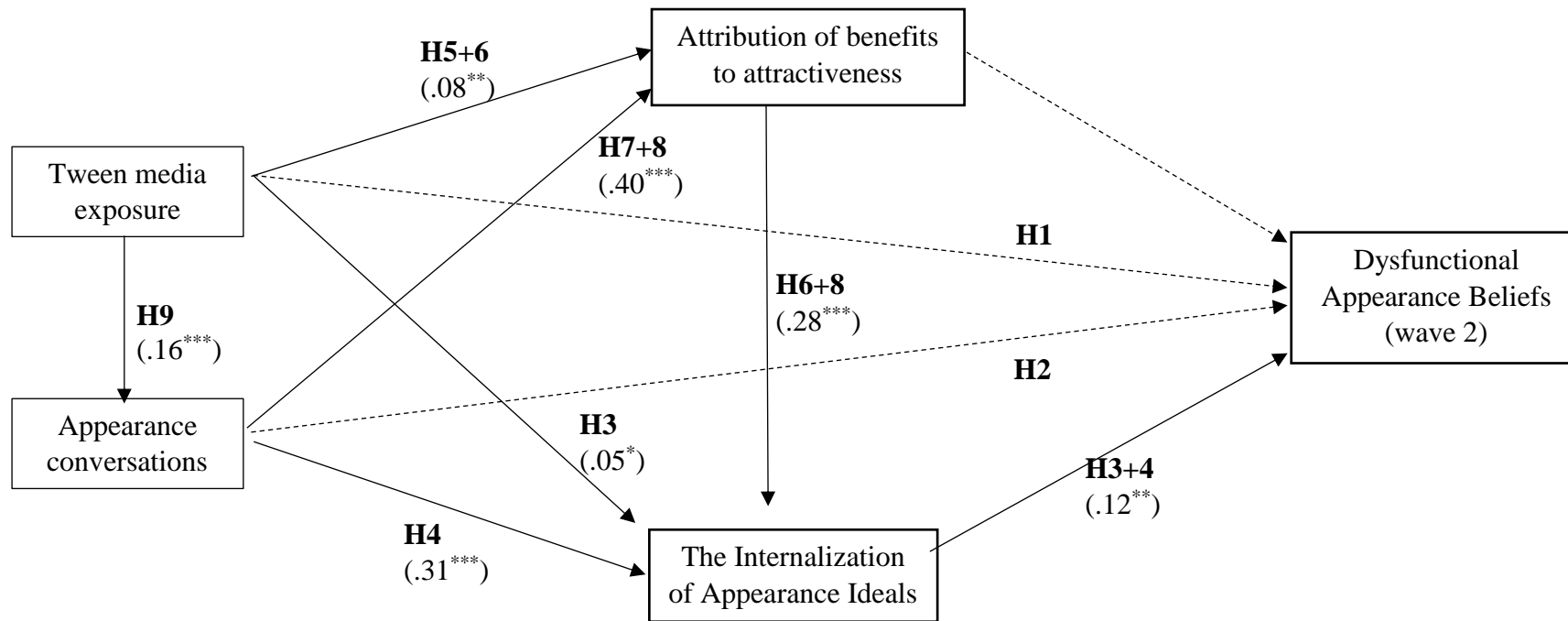


Figure 1: Hypothesized model for the relations between exposure to tween television programs, appearance conversations among friends, attribution of benefits to attractiveness, the internalization of appearance ideals, and the endorsement of dysfunctional appearance beliefs.

Note. — Significant path (* $p < .05$, ** $p < .01$, *** $p < .001$); --- Insignificant path. For clarity, error terms, covariances, and measurements are not shown.